UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,669	07/17/2000	Eric P. Traut	068167.0103	8184

			EXAMINER
41505	7590	07/25/2005	CHUONG, TRUC T

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ART UNIT	PAPER NUMBER
2179	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/617,669	TRAUT ET AL.
	Examiner	Art Unit	
	Truc T. Chuong	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *10 May 2005*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-20* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *26 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This communication is responsive to Amendment, filed 05/10/05.

Claims 1-20 are pending in this application. Claims 1, 8, 11, and 12 are independent

claims, and no claims are amended. This action is made final.

The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior office action.

Claim Rejections - 35 USC § 103

1.   Claims 1-2, 6, 8-15, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Santoro et al. (U.S. Patent No. 6,724,403) in view of Vineyard, Jr. et al. (U.S. Patent No.

6,727,920 B1).

As to claim 1, Santoro teaches a computer system for running one or more software

applications, wherein the software applications are suitable for generating a video output, said

single computer system comprising:

a host operating system suitable for displaying a graphical user interface (a user interface

for displaying tiles (thumbnails) representing reduced sizes of information sources, applications,

and programs, e.g., col. 6 lines 38-59, and figs. 1 & 4); and

wherein the host operating system is able to display for a user a reduced-size

(miniaturized thumbnails, e.g., col. 8 lines 35-67) that are being operated in a background mode

(dynamic bookmarking, e.g., col. 8 lines 29-65, col. 9 line 25, and fig. 1);

although Santoro teaches the thumbnails can be from different platform such as: audio,

broadcast signal (e.g., col. 9 lines 10-17), Santoro does not clearly teach that there are multiple

emulated operating systems being emulated by one or more emulator programs running on the

host operating system. Vineyard clearly teaches that there are more than one operating systems

can be selected from a list (fig. 4). It would have been obvious at the time of the invention, a

person with ordinary skill in the art would like to have the multiple operating systems of

Vineyard in the multiple display resource of Santoro to allow the user to select a desired

operating system via a user activatible control (Vineyard, col. 3 lines 30-32).

As to claim 2, Santoro in view of Vineyard teaches the computer system of claim 1,

further comprising one or more virtual video memory components suitable for storing the video

output of the emulated operating systems (e.g., col. 4 lines 34-54, and fig. 1 & 4).

As to claim 6, Santoro teaches the computer system of claim 1,

wherein the graphical user interface is a windowing environment suitable for displaying

one or more windows (e.g., col. 6 lines 38-59, and figs. 1 & 4); and

wherein the portion of the graphical user interface comprising the reduced-size

representation is a window (miniaturized thumbnails, e.g., col. 8 lines 35-67).

As to claim 8, it is individually similar in scope to claim 1 above; therefore, rejected

under similar rationale.

As to claim 9, Santoro teaches the computer system of claim 8, wherein the reduced-size

representations are representations of the video outputs of the virtual machines that are being

operated in the background mode (e.g., col. 6 lines 38-59, and figs. 1 & 4).

As to claim 10, the modified Santoro teaches the computer system of claim 9,

further comprising a virtual video memory associated with each of the virtual machines

(Vineyard teaches more than OS, fig. 4) ; and

wherein the reduced-size representations are generated from the video information stored

in the virtual video memory associated with each virtual machine (Vineyard teaches more than

OS, fig. 4).

As to claim 11, the modified Santoro teaches a method for displaying a reduced-size

image of multiple emulated computer systems executing on a single computer system, said

method comprising the steps of:

suspending one or more of the multiple emulated computer systems by saving to memory

in the host computer system the image of the emulated computer system (running background

mode, e.g., col. 8 lines 29-65, fig. 1 and Vineyard, e.g., fig. 4); reading in at the emulator

program from memory in the host computer system the image of the suspended emulated

computer system (running background mode, e.g., col. 8 lines 29-65, fig. 1 and Vineyard, e.g.,

fig. 4); interpreting in the emulator program the contents of the saved image of the suspended

emulated computer system (Tiles, grids and content are created, saved and restored via the

metabase, e.g., col. 15 lines 52-64);

displaying a reduced-size representation of the suspended emulated computer system

(running background mode, e.g., col. 8 lines 29-65, fig. 1 and Vineyard, e.g., fig. 4).

As to claim 12, Santoro teaches a method for displaying a reduced-size image of multiple

emulated computer systems executing on a single computer system, said method comprising the

steps of:

reading in at the emulator program from memory in the host computer system the image

of the emulated computer system; interpreting in the emulator program the contents of the image

of the emulated computer system (e.g., col. 6 lines 38-59, and figs. 1 & 4);

displaying a reduced-size representation of the emulated computer system (figs. 1 & 4);

periodically updating the reduced-size representation of the emulated computer system

(dynamic bookmarking, e.g., col. 8 lines 29-65, col. 9 line 25, and fig. 1).

As to claims 13-15, and 17-20, they are method claims of system claims 1, 1, 2, 8, 1, 9,

and 10. Note the rejections of claims 1, 1, 2, 8, 1, 9, and 10 above respectively.

2.   Claims 3-5, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Santoro et al. (U.S. Patent No. 6,724,403) in view of Vineyard, Jr. et al. (U.S. Patent No.

6,727,920 B1), and further in view of Ote et al. (U.S. Patent No. 5,367,628).

As to claim 3, the modified Santoro in view of Vineyard teaches the computer system of

claim 2, but the modified Santoro does not teach wherein one or more of the video memory

components are VRAM memory. Ote clearly teaches VRAM memory (col. 4 lines 47-56, and

figs. 2-3). It would have been obvious at the time of the invention that a person with ordinary

skill in the art would want to have this highly desirable feature of Ote's VRAM into the modified

system of Santoro to provide fast-block-transfer access to the internal memory.

As to claim 4, the modified Santoro teaches the computer system of claim 1, wherein the

emulated operating systems operating in a background mode are active (dynamic bookmarking,

e.g., col. 8 lines 29-65, col. 9 line 25, and fig. 1), and one or more thumbnail images (col. 6 lines

38-59, and figs. 1 & 4); but the modified Santoro does not clearly show wherein information

stored on the video memory components at predetermined intervals. Ote clearly teaches

periodically transfer display text and image data, col. 3 lines 50-55, and col. 4 lines 47-55). It

would have been obvious at the time of the invention that a person with ordinary skill in the art

would want to add Ote's time interval into the modified system of Santoro to update displayed

information.

As to claim 5, Santoro teaches the computer system of claim 4, wherein the

predetermined intervals are such that the thumbnail images are real-time representations of the

video output from the active software applications (real-time and active applications, e.g., col. 8

lines 30-67).

As to claim 16, this is a method claim of system claim 3. Note the rejection of claim 3

above.

3.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable Santoro et al. (U.S.

Patent No. 6,724,403) in view of Vineyard, Jr. et al. (U.S. Patent No. 6,727,920 B1), and further

in view of Brett (U.S. Patent No. 5,850,471).

As to claim 7, the modified Santoro does not teach the reduced-size representations are

created using a bilinear sampling technique; however, Brett clearly describes the bilinear

sampling technique in his High-definition Digital Video Processing System (col. 10 lines 58-74

and col. 11 lines 1-11). It would have been obvious, at the time of the invention, a person with

ordinary skill in the art would want to have this data reduction feature of Brett's bilinear

sampling technique into the modified system of Santoro to improve performance and quality in

graphic data loading process (col. 11 lines 1-10).

Response to Arguments

4.   Applicant's arguments filed 05/10/05 have been fully considered but they are not

persuasive.

Applicant has argued and Examiner disagrees with the following reasons:

Vineyard does not disclose multiple operating systems being emulated.

A definition of the "emulated" is for a hardware or software system to

behave in the same manner as another hardware or software system (see

Microsoft Computer Dictionary, Fifth Edition, page 191). Based on the claim

language, it is not clearly defined that the emulated operating systems as claimed

by the applicant allowing more than one operating systems simultaneously

running on the host computer system. In this case, Vineyard clearly teaches that

the user interface comprises a list of selections of various operating systems such

as: Windows 95, Windows NT, Apple MacOS, UNIX, DOS, etc. (e.g., col. 5 lines

6-10, lines 60-67, and fig. 4); moreover, the Vineyard's operating systems include

Windows 95 and NT, which provides the capability of running two operating

system simultaneously, for example, from the Windows Operating Systems, the

user can run DOS with Windows, or telnet to a UNIX Operating System to

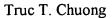operate the UNIX on/with the Windows environment.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Truc T. Chuong whose telephone number is 571-272-4134. The

examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

07/19/05

BA HUYNH
PRIMARY EXAMINER